

3. Caleb

corrected

Program Name: Caleb.java**Input File:** caleb.dat

Caleb's infantry company has been deployed to Bogswamistan for the next two years. Upon arrival Caleb discovers that Bogswamians tell time differently than we do here in the US. Rather than seconds, minutes and hours they simply use degrees as a unit of time. Where once around the face of a clock for us is 60 minutes or 12 hours, once around the face of a Bogswamistanian clock is 360 degrees. Bogswamians simply report the time in two measures of degrees, separated by a slash. For example, in Bogswamian time 12:00 noon for us would be 0/0. 6:00 pm (and am) would be 180/0. 3:45 our time would be 112/270 in their time. Help Caleb write a program that will convert a Bogswamian time to one the rest of his company can understand.

Input: A whole number N representing the number of Bogswamian times to convert to standard time followed by N "degree" times shown as two whole numbers H and M separated by a division sign. H and M will both be greater than or equal to 0 and less than 360. None of the Bogswamian times will contain leading zeroes. There will not be a designation for am or pm in either format.

Output: For each of the N Bogswamian times, output a standard US time in hours and minutes. All minute values should be displayed using two digits. Single digit hours should be displayed as a single digit. (Examples: 9:05 10:09 12:15 4:00) A minute in standard time does not elapse until the equivalent degrees in Bogswamian time has elapsed.

Sample input:

```
5
0/0
180/0
112/270
215/60
357/330
```

Sample output:

```
12:00
6:00
3:45
7:10
11:55
```